Widi Nugroho

Depok, Indonesia | +62 851-5543-6524 | widinugroho.work@gmail.com
portofolio.widinugroho.my.id | linkedin.com/in/widi-nugroho | github.com/widinugrohown

Professional Summary

Data Scientist with a Master's degree in Mathematics (research track) from the University of Indonesia, graduating as best graduate with a 4.00 GPA. Experienced in AI-based health diagnostics, specializing in remote photoplethysmography (rPPG) for vital sign estimation, computer vision, and audio/speech processing, with 4 published papers. Skilled in Python and machine learning, with hands-on experience researching and developing AI models for healthcare applications.

Education

University of Indonesia **Jakarta, Indonesia**

M.Mat. in Mathematics (research track), specialization in Data Science *Aug 2024 – Aug 2026*

Best graduate (wisudawan terbaik) with GPA 4.00/4.00.

University of Indonesia **Jakarta, Indonesia**

S.Si. in Mathematics *Aug 2019 – Aug 2023 | GPA: 3.44/4.00*

Work Experience

PT Seleris Meditekno Internasional **Jakarta, Indonesia**

Data Scientist *Sep 2024 – Present*

- Developed a remote photoplethysmography (rPPG) app for heart rate and HRV estimation with strong performance at low computational cost and latency, for AI-based vital sign estimation in insurance underwriting
- Researched blood pressure and hemoglobin estimation from facial video, and cough-sound models for smoker and TBC detection
- Built an OCR pipeline to read bank statements and automatically settle them against insurance closing data in the GRM system
- Published 4 papers: smoker detection (paper + proceeding), TBC detection (paper), and rPPG heart rate estimation (proceeding)

Data Science Center FMIPA UI **Depok, Indonesia**

Research Assistant *Oct 2023 – Sep 2024*

- Wrote research grant proposals and handled intellectual property (IP) administration
- Built a simple prototype for detecting diabetes from fundus photos
- Taught data science to PT Pamapersada Nusantara (offline), delivered webinars, and served as conference technical committee

PT Bank Permata Tbk **Bintaro, Indonesia**

Data Analyst Intern *Jul 2023 – Oct 2023*

- Filled data into monthly report templates and input data from a data share into an existing system
- Experimented with Excel macros using VBA to generate a single report by pulling data from multiple Excel files

Order Management System (Freelance Project) **Depok, Indonesia**

Full Stack Developer (project-based, built for a family business) *Dec 2022*

- Built a web application to input bedsheet orders from messy WhatsApp message templates into a database using Kotlin, Ktor, Vaadin, and Regex

Data Science Training **Jakarta, Indonesia**

Teaching Assistant (assisted a family member in delivering training for PT Telkom Indonesia) *Jul 2022*

- Created training materials for data processing with pandas, PyTorch, and time series

Skills

Programming & Data: Python, VBA, Excel, Git/GitHub, SQL (basic)

Machine Learning & AI: Machine Learning, Deep Learning, Computer Vision, Audio/Speech Processing, NLP, OCR

AI Tools: LLM (Gemini, DeepSeek) & AI agent frameworks

Research & Soft Skills: Scientific writing, grant proposals, publications | Problem Solving, Teamwork, Fast Response